

#### STATE OF WASHINGTON

### STATE BUILDING CODE COUNCIL

906 Columbia Street SW • P.O. Box 48350 • Olympia, Washington 98504-8350 (360) 725-2966 • fax (360) 586-9383 • e-mail sbcc@cted.wa.gov • www.sbcc.wa.gov

# MINUTES STATE BUILDING CODE COUNCIL

**Date:** October 10, 2003 **Location:** Spokane City Hall

<u>Council Members Present</u>: Stan Price, Chair; Dave Baker; Rory Calhoun; Neva Corkrum; Peter DeVries; Rick Ford; John Fulginiti; Steve Mullet; John Neff; Steve Nuttall; Dale Shafer, Representative Mike Armstrong

**Council Members Absent:** Chris Endresen, John Cochran, Bill Misocky, Terry Poe

<u>Visitors Present</u>: Larry Andrews, Ken Jeffrey, Mike DeVleming, Tom Craig, S. Belzak, Tom Scholtens, Chris Janson, Anjela Foster, Richard Dixon, Chris Dixon, Dwight Perkins, Dan Sexton, Richard Lienech, Jerry Barbera, Brian Minnich, Tena Risley, Paul Chase, Rich Cole, John Hogan, Tom Wagner, Bob Eugene, Diane Hansen, Tom Young, Vicki Case, Richard Mumma, Wayne Hammond

**Staff Present:** Tim Nogler, Al Rhoades, Krista Braaksma, Patti Thorn

#### CALL TO ORDER

Stan Price, Council Chair, called the meeting to order at 10 a.m. Stan welcomed everyone to the meeting, with a special welcome to Representative Mike Armstrong and Commissioner Neva Corkrum. Introductions were made.

#### REVIEW AND APPROVE AGENDA

The agenda for today's meeting was reviewed and approved as written.

### REVIEW AND APPROVE MINUTES

The minutes of the August 7, 2003 meeting were reviewed and approved as written.

## PUBLIC COMMENT ON ITEMS NOT COVERED BY THE AGENDA

None received.

## PUBLIC HEARING ON PROPOSED CODE CHANGES

Stan set ground rules for presenting public testimony. He asked that speakers talk into a microphone, identify themselves at the beginning of their presentations, and confine their comments to three minutes. Stan said testifiers will be called to address specific codes, in the following order: Building Code, Residential Code, Mechanical Code, Fire Code, Plumbing Code, Energy Code, and Ventilation Code. Following those code change proposals, speakers will address amendments to WAC 51-04, Policies and Procedures. He noted that this public hearing on the eastside will be followed next Friday, October 17, by another public hearing on the westside. The goal for the Council at this time is to receive public testimony. Stan encouraged Council members to ask questions to clarify the testimony. He emphasized that discussion of the issues and decisionmaking won't occur until November 21, when the Council meets in work session during the morning followed by an afternoon executive session.

# **Building Code**

# Dwight Perkins, representing International Association of Plumbing and Mechanical Officials (IAPMO)

Good morning, Mr. Chairman and Council Members. Thank you for giving me the opportunity to speak. I'll be brief on the Building Code. The section that I'm looking at, and asking for a revision to, is Chapter 29, the plumbing fixtures [table]. In the minutes from the last meeting, it was correctly stated that we did have some opposition to keeping Chapter 29 in there, for the reason that in the 2003 Uniform Plumbing Code (UPC), in Table 4, it tells about fixtures, the amount of fixtures used in each occupancy, and addresses all the fixtures. So in the spirit of keeping with the UPC intact, I would ask for your consideration to amend the Building Code in Chapter 29 as proposed, by deleting that section regarding fixture units for occupancies and keeping it in the UPC and not deleting it from there. So going back and forth between two different codes for review and interpretation...That's what I have in regards to the Building Code. Thank you, Mr. Chairman.

# Dan Sexton, representing the Washington State Association of Plumbers, Pipefitters and Sprinklerfitters

Good Morning, Mr. Chairman, Members of the Council. Since 1994 we've been meeting as a coalition of union and nonunion plumbers and plumbing contractors, plumbing pipefitters, refrigeration mechanics, sprinklerfitters and others in the industry. I'm here today to urge you to not adopt the 2003 Uniform Building Code (UBC) [meant

IBC per clarification question following testimony]. I think that there's plenty of precedent on the State Building Code Council (SBCC) for not adopting codes set in statute, not adopting codes of one cycle or another. And, first off, I would suggest that the SBCC needs to do further review here.

You know a lot of faith has been put into work that the SBCC did back in 1999. I would ask you all to go back and review those TAGs of 1999 and 2000, when the SBCC compared the 1997 UBC to the 1999 International Building Code (IBC). On that TAG there were no IBC opponents. We knew little about the IBC at the time. We've learned much about it since then. At that time, cities and counties were told that it would save them money. You'll notice that there's no small business impact. It took us four years at the Legislature to get a fiscal note, to get an adequate fiscal note and adopt the IBC. So after the bill passed out of the State Government Committee this year, it did not go to any of the legislative fiscal committees. I'd say that most of that is all based on the faith that the public, that the cities and the counties, the Legislature, the Governor, and CTED have all put into your decision.

Whether you were here in 1999 or not, I think that when you go back and look at those TAGs, I think that there's a lot of biased and outdated information about that. I think the SBCC has so much weight. So much faith has been put in your decisions. For your sake, you need to go back and review this. There's no small business impact. If I may leave you with just one thought, it's I think it's absurd to believe there could be no small business impact when after four years of being told there was no impact, it was a cost savings to local government, we find out that it will cost local government \$1.8 million every three years. Of course there's a small business impact. And we should find out what it is. I urge you to not rush into judgment here. Let's take time. Let's do this right. Let's do the reviews. Let's do the work. I just ask you all to make sure that you know what you're doing. Thank you very much.

Question by John Neff: When you said not to adopt the 2003 UBC, didn't you mean the IBC?

Dan: Yes, I did mean the IBC.

John: What did you mean when you talked about precedence to adopt new codes. Dan: Just because a code is named in statute, there is no reason why it must be adopted. Many examples, such as the 1997 UPC, exist where codes named in statute are not adopted.

Question by Rick Ford: Where did the \$1.8 million come from?

Dan: From the fiscal note to HB 1734. [Dan offered to supply a copy, if Council staff couldn't.]

### Richard Lienech, representing the insurance industry

Thank you, Mr. Chairman, for giving me time. I represent the insurance industry. I live here in Spokane. As far as the International code is concerned, in states that have adopted it, our industry has not followed through whatsoever with it. We're still following NFPA to the book. We've just gotten new directives down. And in the states that do have the International code, the companies have reviewed it and have not abided by it whatsoever. Some parts, yes. Some have had changes. But our latest directive that we received (I went to most of the major insurance companies in the state to represent you people) have not touched any part of it or looked at it. And there has been nothing showing us that they're going to go with it.

So before you adopt it, I would suggest that maybe possibly you touch base with the various insurance companies in this state that represent all the businesses here. Because basically they don't want to get near it. I just figured I'd come here and bring that to light to you to let you know that we have nothing on this. And nobody's mentioned a word about touching it yet. I worked in New York for many, many years. I came out here in 1996. Since I'm here, I've gotten so active with these big companies. The fact of the matter is I don't see them adopting this whatsoever at this point. I just figured I'd bring that to light. Thank you.

# Larry Andrews, representing the HVAC association and Andrews Mechanical

I'm also a TAG member. We were asked here today to speak about the adoption of the International codes. The Northwest HVAC association's training center, plumbers and electrical contractors, we say, "Don't adopt these codes." I'm going to give you three short reasons and then a couple of examples.

Number one is safety. The reason why we have these codes is to have a safe environment. The safety of these new codes is less for our citizens of our state than our present codes. And they don't give the citizens a minimum standard of safety that we're supposed to give them.

Second is the cost. The cost to the citizens and contractors will be a lot more because the liability insurance costs will go through the roof. Lower standards will have higher risks, causing much higher premium costs to the citizens and contractors. Many contractors now are having a hard time getting insurance, and the cost to them is huge. I know. I have to pay these bills. And I have one of the best ratings in the industry. My loss is zero. Last year I had over a 30 percent raise in liability insurance. With these lesser standards, the cost is going to go up.

The other thing that Dan talked about is the cost to the contractors that are going to have to implement this code. We ran some figures for the Legislature. And for the private industry, the cost is over \$56 million to convert to these codes. That's the price for the books, the price for the training, and the price just to get set up to do this. So the small business impact for this state is roughly \$56 million.

Getting back to the safety part, on the residential side, I'm all for affordable housing. But I don't believe 3/8 sheetrock between the house and the garage is a safe standard with no fire caulking. It's always been noted that we should have 5/8 sheetrock so we don't have an accident in the house where someone spills gasoline and burns the whole house down. This new code was going to allow 3/8 sheetrock, less thickness of metal between the garage and the house for the ductwork and no fire caulking. That's going backwards.

We implore you people, if you were to adopt such a code, at least let's get some addendums to this thing so we don't have people dying. That's what's going to happen. You have propane in the basements; we're going to lose families. And I can't implore you enough to take back and readdress this. Because there are going to be people who are going to lose their lives. And the long-term cost for your insurance—everybody's is going to go up. Thank you.

Question by Peter DeVries: What is the difference in time for a fire rating of 1/2-inch, 5/8-inch and 3/8-inch?

Larry: "3/8 will be the standard, could be the standard in the new International Residential Code."

Peter: How does that compare in terms of minutes of fire protection with 5/8"? Larry: "I imagine that 5/8 would give you at least an hour." He also said that 3/8" wouldn't give you much of anything. "I'm not a fireman but we had ½". That wasn't adequate. So then we went to 5/8. And it's been 5/8 for years. And the reason why is because of people having fires in their garage. The ½" wasn't adequate."

# Jerry Barbera, Assistant Code Official for the Airport Building Department

Thank you, Mr. Chairman. I'm also a member of the Building Code TAG, an alternate member of the Mechanical Code TAG, and a member of the Fire Code TAG. Actually, to answer Mr. De Vries' question, the barrier between a house and garage is half an hour, because it only requires the protection for one- hour material to be on the garage side. Half-inch drywall, which starts at 16" on-center and insulation gives you that. Three-eighth inch with thicker insulation also gives you that half an hour of protection. And I think that's all I have to say.

### **Residential Code**

# Brian Minnich, representing the Building Industry Association of Washington (BIAW)

Mr. Chairman, members of the SBCC, I'll attempt to keep my comments at three minutes. While I will address the International Residential Code (IRC), what I would like to do today is sort of give you the perspective of homebuilders in terms of adoption of the International codes.

I stand before you today advocating adoption of the IRC and all of the International codes that have been referenced in the statute, which was HB 1734 that passed this last legislative session. And I think it's important to know because the debate on the IBC started down the route of encouraging not to adopt the IBC. And I think that that's not the case. Obviously the Legislature would not have acted on this issue, would not have debated this issue for the last four to five years, if it was not a requirement for them to take action, for the Council then to be able to adopt a new building code in the state of Washington, which is what's happened. They adopted the International codes with some exceptions, one of them being the UPC. But now in statute the International codes are referenced, and those are the codes that you're discussing at this point.

We're encouraging you to adopt that. We don't really think that you have any other options, other than adopting the International codes, obviously with the changes that the Council feels are necessary to add to that. And with that, we would encourage you to the greatest extent possible to stick with the International codes, the IRC, the IBC. We think this offers the Council a great opportunity in terms of code uniformity, not only in the state of Washington, but also across the country, as other states are now in the process of adopting the International codes. Again it's not just uniformity here, but you have consistency with other states as well. And that's certainly important for businesses, not just the construction industry, but looking to locate in this state and contractors and architects and other design folks that may be doing work in other states across the country.

We believe that the International codes are user-friendly codes. I can't stand here and tell you that the builders like everything in the International codes. We're never going to like everything in any building code, quite honestly. But we think this is a fair code. We

think the process in which it was developed nationally was a fair process where everybody got an opportunity to participate in that, including the homebuilders. And we encourage you to adopt that.

With that, again, we'll be encouraging you to the greatest extent possible, not just in this code adoption cycle, but also in the future, to stay with the International codes as much as possible. We think that is extremely important. With that, we'll be getting some specific comments in relationship to the Energy Code and the barrier-free requirements at your hearing in Renton next week.

But I also, just in terms of the Energy Code, quickly would like to say that while I don't think there are a lot of substantial changes that have been made to the code this year, I'll also remind you that changes to the Energy Code were made a couple years ago. You may remember, just last year the Energy Code that applies to high-rise structures was amended and fixed because of some changes that did not work two years ago. So, from the building community standpoint, whether you're a commercial builder or a residential builder, we get kind of nervous when we make changes too often to the code. I think that becomes very confusing to the building community when you do that. So as you look at the Energy Code changes, please keep that in mind. And again we will be offering some more specific testimony in Renton.

Thank you for your consideration. I'd like to commend the Technical Advisory Groups for their work on the codes. Again we may not agree with all of the decisions, but from our analysis they have deferred in many areas to the language that's contained in the IBC and IRC. We appreciate that. There are some areas that we would like to see them stick with the IRC language. We'll raise some of those issues next week. Thank you.

Question by Representative Armstrong: If we adopt the International code, will this help the counties have more continuity from county to county? Do you foresee a tremendous cost to local governments in the adoption of these codes?

Brian: From our standpoint, I'll answer the last part of that question first. From the builders' standpoint, I don't think we see a tremendous amount of cost to the counties. I think a lot of them over the last couple of years have been gearing up for this anyway and preparing for adoption of the International codes. So I don't think there's any mystery there. Our association is going to be offering classes to our members over the next six months to educate them to the International codes. I know the building departments are starting to offer education courses as well. Yeah, they do that anyway. When you go through a code change cycle over a three-year period, which is what happens in the state of Washington, and you update the Uniform Building Code, which is what we've been operating under, they have to go through that training anyway, to update folks to the changes in the building code. So I think that's sort of a course of action that they normally take.

In terms of the uniformity question, we'll improve uniformity from county to county. I hope that is the case. What we hope is that as local jurisdictions adopt the International codes in either the cities or the counties, that they elect to stick with the International codes, just as we are encouraging you to stick with the International codes to the greatest extent possible here. We're also hoping that cities and counties will do that as well, that many amendments that they've adopted and added to the codes over the years will go away because they realize that they may not need that any more, that particular change,

whatever that was. So we hope over time, Representative Armstrong, that that is the case, that it does improve uniformity.

# **Dwight Perkins, IAPMO**

Good morning, Mr. Chairman, Council members, [there are] a couple of things I want to point out regarding the Residential Code. I am aware that in the legislation, it does say that with the provisions of the IRC plumbing and electrical, they will be deleted and amended with the UPC and the National Electrical Code as promulgated by NFPA. I think that's a good thing.

I do have concern, and I just want to bring that to the attention of Council members, that there is rumor that some local jurisdictions may want to or wish to adopt the plumbing and electrical provisions of the IRC on the local level through what's known as alternate materials and methods. And I would caution the Council to be aware of that and to...I know it says in the statute that when a local jurisdiction wants to make amendments to the residential code, they do that by coming before the Council for those changes. Again, keeping with the spirit of the legislation, I'd ask that the Council, if they do adopt these codes, to make sure there is a notice that the local jurisdictions do adhere to the legislation and not try to end-run your authority as a Council by adopting provisions that we feel are less stringent than the National Electrical Code and the UPC under what's known as "alternate materials and methods." That is specifically for that alternate materials and methods, and not the wholesale adoption of codes, in our opinion. Thank you.

# Dan Sexton, representing Washington State Association of Plumbers, Pipefitters, and Sprinklerfitters

Mr. Chairman, Council members, I'll try to cover different ground. [There are] a couple of things I would like to point out. I would like to encourage the Council to not adopt the 2003 IRC. Once again the options are whether or not to adopt, or to amend. And I would ask you to go back once again and take a look at 1999-2000 TAG reports. There was no reference to the IRC. The IRC was not studied; it was not looked at by the SBCC. It was added to a bill strictly as an afterthought.

And I would like to point out and remind everyone that these new performance-based codes are much more expensive, much more labor-intensive, much more expensive to local government than the old-fashioned, standard Uniform prescriptive-based codes which we've been using for 30 years, which everyone has used. And the IRC changes the proven process too, also making it more burdensome on local government. So I really think you need to take a look at all the issues that everyone has. You know, put a great deal of faith in what the SBCC has said. And just a reference that other states are adopting these International codes. I remind you once again, I don't think these International codes have performed as promised, anywhere they've been adopted. One example is North Carolina. They were adopted in 2000 and postponed until 2001, then 2002 and 2003 because of the complexity of these codes. That's something that we've never, the Council has never, looked at. And I urge you to consider all of that. Thank you very much.

### Larry Andrews, representing the HVAC Association and Andrews Mechanical

We're concerned about, on the homebuilding, residential code, is again safety. Like Jerry brought up, that 3/8" sheetrock with insulation behind it has a half-hour rating.

What Jerry didn't envision is many of our buildings don't have insulation above the house. Okay, you've got your garage. And then you have open trusses in the garage. Then you have sheetrock that's got to go all the way up. Well above the insulated structure, there is no insulation that's needed. So if you have a fire in the garage, it goes through the rafters and then burns down. Three-inch sheetrock won't give you that adequate protection.

The other thing is combination smoke/fire dampers. Most people, from the articles I read from the NFPA, die from smoke inhalation and not from fire. This new code will not require combination smoke/fire dampers for those registers in a garage that offer a central heating system, like our present code does. This code will not require fire caulking between ducts passing from the garage into the residential structure, like our present code requires. This code does not require any distance from a dryer to your window. I can go on and on, but it's less, less, less. And the people that are going to die and the people that are going to be inconvenienced are going to be citizens of this state. And there's never been a study done on the Residential Code versus our present code to see if there is adequate safety. And if it's based off our present code, it can't be adequately safe.

We deal with the people every day. And a lot of them are older people. And they don't react like younger people do. We urge you to take time and re-review this International code to bring these standards back into this code so we don't have some disasters.

The other thing that we see about this International code, I was told that this code was set up to prove, we had to prove that it had to go in there because it was a necessity. Well we do high, dry plumbing every day. And standard practice for primary/secondary pumping says that I can pump any direction I need to to get that heat into that system. This code prohibits me from using primary/secondary pumping on boilers, which has been the common practice for the past 30 years. Now I ask you, why is this in the code, when there's no engineering data to support it. Yet we are told that anything had to be proved before it got into this code. And there's numerous situations like this, adding cost without adding safety. Thank you.

### **Mechanical Code**

### **Dwight Perkins, IAPMO**

Thank you, Mr. Chairman. [I have] a couple [of] comments on the Mechanical Code. I'd like to just digress a little bit about the codes and the different organizations that develop and promulgate codes. As you know, Mr. Chairman and Council members, the 2003 Uniform Mechanical Code, which is a stand-alone code that would work with any building code, has worked with building codes in the past in this state. It has gone through the ANSI accreditation process. We have been accredited by ANSI whereby it is done by a consensus body. It is voted on by the membership. Everybody has an equal say in the development of this code, but more importantly, has a vote on the changes in the code. Unlike the International Mechanical Code (IMC) that is being forwarded to the Council for adoption, I know we had a long, hard-fought battle in the Legislature. I know the Legislature is giving direction to the Council to adopt the IMC. I would concur with some of Mr. Sexton's previous comments about being able to review and look at the

different codes and to make your recommendations. So I would ask for consideration for the UMC as promulgated by IAPMO. Thank you.

## **Dan Sexton**

Mr. Chairman, Council members: Once again I want to ask you to not adopt the 2003 IMC, and I want to refer you back to 1999's TAG where the SBCC compared the 1997 Uniform Mechanical Code to the 1999 International Mechanical Code. There's been this myth of information promulgated for the last few years that the Uniform Fire Code (UFC) and the UMC are no longer published and no longer available. That's not true. They are supplied books and training free of charge to municipalities. They adopt them. They're the same books we've been using for the past 30 years. They're less complicated, less costly and more safe. I urge you to make very sure of what you're doing before you adopt this, and not to adopt the IMC. And hopefully there's a couple of other times I wanted to talk about NFPA 54 and 58. Maybe I'll do that later. Thank you very much.

### **Larry Andrews**

One of the first things I want to bring out is something that just recently happened. And I don't know if you're aware of it. But the UPC and the UMC are the American National Standards now. They've just been accredited with that recently.

I'm here to mainly address the National Fuel Gas Code. One of the fuel gas codes might be NFPA 54, NFPA 58, and NFPA 31. That's what our industry deals with. First the National Fuel Gas Code is NFPA 54. It's recognized by all manufacturers. The International code is not. When you get a manufacturer's instructions, it tells you to install it according to NFPA 54. All manufacturers tell you to use NFPA 54, 58 and 31 on the installations of their appliances, not the International Fuel Gas Code (IFGC). You must first do everything by 54 or 58 and 31. These are the American national standards developed by the industry, not by just code officials. [We follow] American national standards, then all other local codes. But first, it says "and." So first you have to do everything by 54. From a liability standpoint, I have no choice but to follow NFPA 54 and the NFPA codes, because if I don't follow them, I'm in violation of what the manufacturer wants.

The IFGC is not a commercial code. And I've got several examples. If you want our industry to grow in this state and not handcuff us, you will adopt the NFPA 54. The IFGC does not have equivalent length and pipe value charts so you can size your gas pipe. What that means is a huge cost savings on large gas piping installations. The IFGC does not have flow-through gas pipe orifices. [That's] very important for the industrial and commercial side, protecting their inputs properly when you're firing a gas appliance safely. You don't need to shut down the whole entire facility to check the inputs. The IFGC has no back pressure protection requirements. We're dealing with high-pressure gas. And we've got oxygen and stuff going into it. We need these requirements, otherwise we're going to have rapid expansions all over the place. The IFGC has no overprotection. What that means is that if we have elevated gas pressures, we have to have an overprotection regulator on there, so if the gas pressure goes beyond the limit, it will be ventilated to the outside instead of into the appliance, where you'll have the rapid expansion. This used to be just mainly on commercial equipment, but now, with twopound gas in the residence, it can happen in your own home now. And that requirement needs to be established.

The IFGC has no expansion and flexibility of gas pipes. We're talking large gas piping area where we need expansion joints so we don't have the thing coming apart. The IFGC does not address that. The IFGC lacks safety. It has no emergency procedures for gas leaks. The IFGC has no methods for checking for gas leaks. The IFGC has no procedures for vent damping. The IFGC has no coordinated gas utility equipment design construction and maintenance section. Maintenance goes with safety.

The final thing is cost and confusion. If we've got two books out in the field, there's going to be mass confusion. The industry and its workers have over 30 years with NFPA and all it covers. Whereas the IFGC has taken NFPA 54 and inserted it into its books, leaving large gaps in safety. The IFGC left the commercial almost out completely. Yes, the IFGC has gas cables for four inches with the longest run pipe. It falls far short of industrial and commercial safety and the tools you need to get the job done.

These are just a few items missing that we've brought to your attention. Many more exist. We're asking you to give us a break and let us have what we've been working for for the past 30 years, along with our right to vote on these code changes, which would be taken away with the International system. Please give Washington State these NFPA codes so our industry won't be handcuffed by the ICC codes and can have the safety it's had in the past. Thank you.

# Tena Risley, Executive Director of the Northwest HVAC Association and Training Center

Good morning. Thank you, Council, for coming to Spokane. I'm here today representing mechanical and plumbing contractors. Also today I'm here for electrical contractors under the current National Electrical Code. We're asking for your consideration in not adopting the IMC and also for your consideration in keeping one gas code to be the NFPA 54, and also keeping the NFPA 58 and one oil code, NFPA 31. The contractors that I represent today are currently in the field of qualified technicians. Their qualifications are more than verified through the licenses that they carry, such as the State Electrical 06A Technician, the State Electrical 07 Technician, the State Electrical 07A&B Technician, the State Journeyman Plumber's License, the City of Spokane Heating Mechanics I, also carried by certain Seattle contractors, the City of Spokane Heating Mechanics II, the City of Spokane Oil Burner's License, the EPA Universal License, the Refrigeration License of Seattle, the Corrugated Stainless Steel Certificate(s), the Master Technician Certificate Achieved through 99 hours of accredited training, and other state-accredited trade schools that have gained their certificates as well.

Please be aware of the recent events through the new Mechanical Board from the state of Idaho. The majority of the Board did indeed hear the voice of the mechanical industry and determined the desire for the governing code to be the IAPMO codes. With the majority of these technicians who carry most, if not all, of these licenses requesting to keep the UMC and the other codes through IAPMO, please consider them to be resourceful candidates throughout this decisionmaking process in helping the Council in determining the most appropriate and safe codes for the Washington State consumers. Thank you.

## Fire Code

# Paul Chase, representing the Spokane Valley Fire Department

We encourage you to adopt the International Fire Code (IFC). I just have a couple of items here. One, I'd like you to delete one line, and then one line to move to another location. I've been a little bit on the ball. I've got it to Steve Nuttall, literature, and we could probably have a little feedback on it. On page 9 of the requirements regarding Group E education, the line that says "A minimum water supply meeting the requirements of NFPA 13 shall be required." I would just ask you to delete this line here because it's actually a part of the NFPA that tells you you need to have enough water to run the sprinkler system. And it's specific as to how that needs to be. It offers another level of confusion by including it with... It looks like two different standards of required fire flow. For example, we typically adopt, from the very last page, the appendix that deals with fire flow for buildings. And if you sprinkle those buildings, then they allow you to reduce the fire flow by 50 percent. It kind of gives the illusion, when you put this line in here with Group E requirements, that you want Group E to actually have less water to run those buildings. And it's created some confusion in the past. I realize this is an existing line that we use in the current Uniform Fire Code and building code, but it has caused us some problems for Spokane over the past few years. And it would be nice if we take that line out and just use regular NFPA requirements, listing some of those specifics in the NFPA.

The second part, also on page 9, the line that says, "The fire code official may reduce fire flow requirements for buildings protected by an approved automatic sprinkler system." I'd just ask you to move that over to Section 508.3 and add it there as an incentive to encourage people to sprinkle their buildings. In an economy of time, the same sections I ask you to alter, I include in the building code. So I won't ask for my two minutes there.

This is just my recommendation. Thank you for your hard work on this. Codes are a consensus thing. And it takes a lot of time to help the pendulum swing one way and then the other. Thank you for not doing the 2000, and waiting until the 2003 code. I think we're ready now. And I appreciate your work on it.

#### Dan Sexton

You made some excellent points about some of the conflicting references between the IFC and the UFC, which we've been using. The UFC is completely coordinated with the UPC, the UMC, the National Electrical Code and the Life Safety Code. You need to take a look at all of that. And once again I urge you to go back and look at the 1999 TAG. There was no decision made; there was a tie; there was no decision made between the UFC and the IFC. Once again, the SBCC was comparing a 1997 UFC to a 1999 IFC. And there was no decision made, but the IFC advanced forward. And I don't think that anyone has ever raised good reasons why we should replace the UFC, or why we should replace the UMC, when they're completely coordinated with all these codes and many, many more.

[I'd like to make] just one more quick point about the NFPA 99. Some people think that NFPA is a bad word. So I'd just mention here there's pro and con. And I just want to point out (and this is my last point) is that the UBC referenced one NFPA code, and I believe, you know the experts are here, you can tell me, but I believe, the IBC references something like 154. So the National Fire Protection Association is not a bad word. The

Life Safety Code and NFPA have been around for over 100 years. And we shouldn't just throw those codes out. Thank you so much.

# Angela Foster, Washington State Fire Marshal's Office, a part of the Washington State Patrol

Good morning. I apologize for my lateness. We lost the windshield in our plane this morning and had to make an emergency landing. I'm a little shaken up. So please bear with me. Steve, I should have taken your advice. We invited Council staff to fly with us. So we're really glad now that you didn't this morning.

I'm here today on two parts. First, on behalf of the Fire Code TAG, we typed up a proposal on which we had concurrence from the Fire Code TAG, dealing with the fireworks and explosives issue. I have that available in writing. I'm not sure if you want me to read it to you.

Stan asked Anjela to synopsize the proposal.

Basically on the fireworks piece, we're just going to reference back to RCW 70.77, which regulates fireworks. And we've also added a reference to WAC 212, which is the WAC that we promulgate in response to RCW 70.77. And that language is consistent with the code, state amendments and the UFC. We also added a reference to L&I's RCW dealing with explosives. And that was added to 3301.1.1. That statement just says "see also RCW 70.74 and Chapter 296-52 WAC." And we understand that there were concerns from the Department of Labor and Industries on that. I'm not sure if they have anybody here to testify.

On the second proposal that we brought forward, and we have talked with Steve Nuttall, the Chair of the Fire Code TAG, who's asking (and this is from the State Fire Marshal's Office) that a new section be added to WAC 51-44-009, adding additional requirements in addition to the rules established in RCW 19.27 and WAC 51-44. We began to shift out the statutes that the State Fire Marshal's Office has statutory responsibility for. Along with the WACs, we have promulgated some additional rules in the licensed facilities that we regulate. So that when people go by their state amendments and their state code, there may be additional requirements that they need to comply with as well. Thank you.

Question by Representative Armstrong: Are you okay with the code? Angela: Yes.

### **Plumbing Code**

### **Dwight Perkins**

Mr. Chairman, Council members. First of all, I'd like to single out staff, Krista Braaksma, for her hard work. I was a member of the TAG. And without her patience and great work, we probably wouldn't have finished. So in the blue packet you have regarding the Plumbing Code TAG, I would probably say that there are more things being deleted in state amendments than added because of what's in the code. As the development process of the 2003 Plumbing Code, there were several—There was a lot of participation, and quite frankly some of the members who came from Washington State,

primarily to the standards that are inclusive in the code. So local jurisdictions, states and local jurisdictions do not have to have two of them. You have a several-page document regarding the Plumbing Code. Most of it is deletion of state amendments because they're in the code. So I'd like to thank people in the state of Washington for working with the code development.

With that, again, I'd ask that you consider replacing Chapter 29 in the Building Code with Table 4, fixtures, in the Plumbing Code. And I believe that's all I have. Thank you.

## Tom Craig, representing the City of Spokane

I'd just like to comment on one item on page 12 of the amendments, to allow the drip pan to be used as a termination for temperature pressure relief valve. I do not consider that a very good idea. If the relief valve does discharge, it's going to spray water everywhere. So the approved design unless you detail what that approved design is, 6, 8, 12 inches deep, it's not going to work very good. Water's coming out of there at 150 psi, and it's not going to stay in a one-inch drip pan. So it's going to cause a lot of damage to the structure.

John Neff: I'd like to follow up a little bit. What you're asking then is to take the words "approved design" out of there and put in a minimum dimension.

Tom Craig: Yeah, coming up with a design that's going to work. Or delete the entire section. I'd prefer to see the entire section deleted.

Dale Shafer: What section are you suggesting we...

Tom Craig: Item 1, under Exception on page 12. It reads "<u>To a water heater drip pan of approved design</u>, provided the pan is drained with pipe and fittings of the same size and material as required for the relief valve drain."

# Rich Cole, representing the City of Moses Lake

In Table 29 of the UBC, most of the plumbing fixture counts are done by the architect. The design and mechanical system is done in the plumbing. I'd like to see Table 29 stay in the Building Code. Actually since it's been brought up a few times today, I'd like the Council to look at adopting the International Plumbing Code (IPC) versus the UPC. We meet a lot of architect groups out of town, and they have verbatim the whole International code. It does raise a lot of eyebrows. And we tell them that "You know, you have to go to a different set of codes for this item. So..." Thank you

### **Energy Code**

# John Hogan, representing City of Seattle, Department of Design, Construction and Land Use

Good morning, Council. Thank you for the opportunity to provide comments today for those revisions to the Washington State Energy Code (WSEC). I have three general comments and then a few specific comments. The first general comment – As you know, the WSEC is a Washington State code. There is no other organization or process that takes care of maintaining the document. So we commend the Council and the TAG for their work on maintaining this document.

Secondly, I would like to say we support the proposed revisions, with one exception and a couple of clarifications. And we strongly recommend that they be adopted at this time.

Third, I'd particularly like to commend the SBCC for their work on updating the nonresidential building envelope requirements. It brings them closer to ASHRAE Standard 90.1. Not all the way there, but closer. And, for those of you who are aware of this, ASHRAE Standard 90.1 is cited in the U.S. National Energy Policy Act as the basis for state nonresidential energy codes.

Brian Minnich had mentioned the revisions to some of the building envelope requirements for residential buildings in previous cycles. However the nonresidential building envelope requirements have been neglected. There have been some previous revisions to mechanical lighting in recent cycles, but not to building envelope. So we commend you for taking a look at that this time around.

In terms of specific comments, first I want to talk about Section 1433, which is on page 95 of the yellow pages. It's a requirement for economizers, and there's an Exception No. 1. There were some proposed revisions to that. We would recommend that the first couple of sentences in that exception not be struck, that they be reinstated. I think the intent in this section all along has been to require an economizer cycle with some exceptions for small equipment. By striking those first two lines and allowing the 20 percent sizing limit later on, it means it could be very large units that went in without economizers. I'm not sure this is the intent. It might have been inadvertent. But reinstating those lines would take care of that.

In addition, in Seattle we would like to recommend this whole section just apply to existing buildings. We think new construction should be done right the first time, should have an economizer cycle. If there are unexpected developments later on with an existing building and alternations, then there would be this opportunity, a way to remedy this. So that is our comment. And that's the key place where we would recommend modification.

In terms of a couple of clarifications, on page 81 of the document in the Building Envelope Tables (and page 81 has the table for Spokane, Table 13-2), there is a Footnote 2 that addresses concrete masonry walls. We recommend that the clarification be added that the U-factor compliance option there be indicated as an area-weighted U-factor as opposed to simple U-factor. I believe this is consistent with the intent of that. In discussions with Tom Young of the masonry industry, he's expressed some concern that this wasn't explicitly stated. So we would support that clarification to address that.

The last specific one is in 1411.1 on page 82. There's a last paragraph on limitations with single-pass cooling equipment. We recommend some clarifications in the wording to make that read better.

So, in conclusion, I want to also mention the SBCC has some responsibilities under federal legislation. The Energy Policy Act requires that when Standard 90.1 is updated and the U.S. Department of Energy issues the finding on that, that within two years the Council must determine whether the state code (and each state must do this) achieves comparable energy savings. By adopting these revisions that are proposed here today, you will be able to make that finding by July 2004 with a positive recommendation.

So thank you for allowing me to provide comments. We'll supply written versions of these with specific language by the 17<sup>th</sup>. And I'd be glad to answer any questions.

Question by John Neff: On your first proposal, on page 95, you said the first two lines should not be struck?

John: The first two sentences.

#### **Dan Sexton**

I'll be brief once again, but you know I think things are looking up and improving. I concur with much, if not all, that John Hogan, City of Seattle, said. If John, myself and the SBCC can get on the same page here, thing's are clearly looking up.

It's my recommendation to adopt the model energy code. I had with me an excellent letter that staff, Mr. Tim Nogler, wrote to the Department of Energy, I believe last year, describing our model energy code. And I can't find it right now. But I urge you all to take a look at that and think about what it means and the reason why our model energy code is so good. It's cost-effective. [The reason is] because it's prescriptive. It's not performance-based. It's prescriptive. Thank you very much.

# **Ventilation Code**

### Chris Dixon, representing Gold Seal Mechanical

Thank you. I am a journeyman plumber and also a certified mitigation writer and measurement for radon, certified by the National Environmental Health Association (NEHA). I just ask that certain sections of this code be reviewed again, maybe looked at. In part, Sections 503.2.6, several areas in there; 3-inch minimum diameter for slabs 750 square feet or smaller. In training with the Western Regional Training Center, their standards with NEHA, their requirements there are basically just comments made that thousand square foot to go to four-inch diameter pipe. Another section there calls out for approval for slabs that are 3,000 square feet or larger. Just a comment that... Who would be the certified mitigator to approve such things in that section? To be accepted piping, PVC Schedule 40 or ABS Schedule 40, currently that pipe is already being used in that application. You know, it's just providing the means of exit out of the house.

Another section in there, 503.2.8 regarding separate aggregate areas—I do have some drawings here that you could have that show some alternate methods for this section. It's asking that basically if you have what they're going to call a grade B footing, the separating sections, that each of those sections be vented. NEHA and the WITC training center are giving us applications that provide for sleeving, going through those footings, not continuous. But those do not need to be hooked up continuous, as long as you provide means between the two sections, that the A would get there, will allow for the flow for the radon. Basically when we talked about it in training, and these are people who are certifying us to do these mitigation systems, when we were at that training we mentioned that here in Washington that we were putting the four inches of aggregate in there. And they were so impressed by that fact that it was unbelievable. They said that "you guys should never have a problem of getting a system to work." To the best of my knowledge, I don't know of a system that's been installed in these areas that can't be corrected by the means that we're using already.

The building cost may be inflated by enhancing the standards. It might contradict what was put forth by EPA, NEHA and WITC. Thank you.

Question by Dale Shafer: To sum up, are you saying that you don't want any of this or you want some tweaks?

Chris: Some tweaks, some further review of certain sections. Dale: So are you going to provide us with some suggestions?

Chris: Sure.

# WAC 51-04, Policies & Procedures

### **Dan Sexton**

This is probably the spot where I want to talk about NFPA 54 and 58. Because this is mentioned here. And just as they were in HB 1734, Representative Armstrong will remember, the bill that passed the Legislature kind of sailed right through regardless of whatever I had to say. However, at one point it stuck. And the Legislature put it in there, NFPA 54 and 58. And now some people have been working the TAGs and trying to give what the State Legislature did a whole other meaning. As you know, NFPA 54 is the National Fuel Gas Code. It has nothing to do with liquid petroleum gas. And so people at the Mechanical Code TAG are trying to say that the bill that passed the Legislature only dealt with liquid petroleum gas. Nothing could be further from the truth. The language in NFPA 54 and 58 was meant to be descriptive of the titles of those codes, and that's all.

And so I just need to bring that to your attention. We don't need more codes. We don't need more fuel gas codes that are not listed in statute or anywhere else. Thank you.

# **Dwight Perkins**

Thank you, Mr. Chairman. Next week I'll give a little more detail. Following along Mr. Sexton's discussion, the organization that did support the legislation, the Northwest Propane Gas Association, because of the language that was inserted along the process regarding NFPA 54 and 58, it was my understanding and my belief that the reason they bowed onto the legislation, if you will, was because they felt that they'd be able to maintain the two documents, NFPA 54 and 58. It's interesting the way... I think what their intent was, and with what came out, I was noticing in the IFGC, Section 401.2, liquefied petroleum gas storage, the storage system for liquefied petroleum gas shall be designed and installed in accordance with the IFC and NFPA 58. And I think that's kind of where the verbiage kind of got slid in, if you will. I think it was a lack of understanding of how the process works in the legislative arena. What became actually on paper was different. I think the intent of the proposers and the Northwest Gas Propane Association, their intent is what they thought was happening. So naivety of the process caused them to get snookered. They'll probably be in Seattle talking about that. And I'll give more qualification on the issue and rationale next week. Thank you, Mr. Chairman.

Stan thanked everyone for taking the time to make their concerns known to the Council. He said the Council will duly consider testimony it received. He reminded everyone that there is one more session at which testimony will be received by the Council from the public. That public hearing will be held on Friday, October 17, beginning at 10 a.m.

### STAFF REPORT

Tim summarized future action by the Council about these code change proposals. A second public hearing will be held at the Holiday Inn Select in the SeaTac area on October 17. Then the Council will meet in work session on November 21 to consider issues and discuss concerns raised during public testimony. That afternoon, in anticipation of a December 1, 2003 deadline, the Council will enter rulemaking and decide which codes to adopt. Documents for that final rulemaking will then be filed in January. And the new codes will sit through the 2004 legislative session and become effective on July 1, 2004.

During the period of January to July 2004, training of local officials, builders and the general public about the new codes will occur. Council staff has been talking about training with the BIAW, WABO, the State Fire Marshal's Office, the Association of Local Fire Marshals and many other groups. It's important that the Council be involved in this training and that training be consistently provided among the various groups.

### **OTHER BUSINESS**

None.

## **ADJOURNMENT**

Lacking further business, Stan adjourned the meeting at 11:35 a.m.